



## **SOUTHWEST GAS CORPORATION**

Jerome T. Schmitz, P.E., Vice President/Engineering

July 13, 2012

Michael Robertson, Program Manager  
Gas Safety and Reliability Branch  
California Public Utilities Commission  
320 West 4<sup>th</sup> Street, Suite 500  
Los Angeles, CA 90013

**Re: 2011 General Order 112-E Audit of Southwest Gas Corporation's  
Needles, California District Gas Distribution Facilities  
CPUC File No. GA2011-22**

Dear Mr. Robertson:

Southwest Gas Corporation (Southwest) respectfully submits the following response to the finding noted in your report of CPUC's GO 112-E Pipeline Safety Audit of Southwest's Needles California District from May 23-27, 2011.

If you have any questions, please call Jim Mathews at (702) 364-3340.

Sincerely,

Attachment

cc: (Electronically with attachments)  
M. Epuna, CPUC  
D. Gallo, SWG  
P. Gustilo, SWG  
L. Malloy, SWG  
J. Mathews, SWG



## Summary of Inspection Findings of May 2011 SWG Needles District Audit

---

### **Issue: Storage of Plastic PE DRISCOPIPE outside beyond 2 years**

GSRB staff observed piles of plastic Polyethylene (PE) pipes (DRISCOPIPES 8100) manufactured by Performance Pipe stored outdoor unprotected for more than two years at the SWG Bullhead facility. 49 CFR, Part 192 Section 192.59(a)(1) states:

*"§ 192.59 Plastic pipe.*

*(a) New plastic pipe is qualified for use under this part if*

*(1) It is manufactured in accordance with a listed specification; and ..... "*

The listed specification in this matter is the American Society for Testing of Materials (ASTM)

D-2513 1999 edition. ASTM D-2513-99, section A1.5.7 states:

*"Outdoor Storage Stability-PE pipe stored outdoors and unprotected for at least two years from date of manufacture shall meet all the requirements of this specification. P E pipe stored outdoors for over two years from date of manufacture is suitable for use if it meets the requirements of this specification."*

In addition, Title 49 CFR, Part 192 Section 192.321(g)(1) states:

*"§ 192.321 Installation of plastic pipe.*

*(g) Uncased plastic pipe may be temporarily installed above ground level under the following conditions:*

*(1) The operator must be able to demonstrate that the cumulative aboveground exposure of the pipe does not exceed the manufacturer's recommended maximum period of exposure or 2 years, whichever is less."*

SWG provided the Commission staff technical notes from Performance Pipe (DRISCOPIPE 8100) Model Specification which states:

*"Section 2.3 ...Materials shall be stabilized against ultraviolet deterioration and shall be suitable for unprotected outdoor storage for at least four (4) years."*



*"Section 2.5 Polyethylene Pipe. Pipe shall be DRISCOPIPE® 8100 polyethylene pipe, and shall be manufactured and tested in accordance with the latest published edition of ASTM D 2513. "*

The Performance Pipe DRISCOPIPE 8100 Model Specification SWG provided did not reference ASTM D-2513-99. In addition, this "model specification" did not have any technical data to demonstrate that a segment of that pipe was tested in accordance with ASTM D-2513-99 after it has been exposed or stored outdoors unprotected for more than two years. Based on the data SWG has provided, the Commission has determined that the PE pipes SWG stored outdoors unprotected for more than two years did not comply with 49 CFR, Part 192 sections 192.59(a)(1) and 192.321(g)(1) unless these PE pipes met ASTM D-2513-99 specification requirements and test methods. PE pipes shall not be stored outdoors or exposed to ultraviolet light for more than the plastic pipe manufacturer's recommended maximum period of exposure or maximum of two years, whichever is less, unless the PE pipes meet the ASTM D-2513-99 requirements.

**Southwest Response:**

Following the CPUC's audit, the Southwest Gas (Southwest) Bullhead City warehouse personnel removed from potential use any pipe that had been stored outside and without shade protection for longer than two (2) years while Southwest addressed the CPUC's concern.

Southwest obtained updated information from Performance Pipe, the manufacturer of Driscopipe PE M-8100, stating that it meets the requirements of ASTM D2513-99. Additionally Southwest obtained Performance Pipe's *Technical Note PP 839-TN Weather Ability Outdoor Storage Limits of Performance Pipe, Gas Distribution Pipe Products*, which provides the technical data and test results to support the outdoor storage of Driscopipe PE M-8100 for up to four (4) years

Regardless, Southwest will not install any PE M-8100 pipe in California that has been stored outdoors and without shade protection for more than two (2) years until the outdoor storage requirements for polyethylene pipe are clarified and updated through the adoption of a more current version of ASTM D2513 in both state and federal pipeline safety regulations. We appreciate the CPUC's review of this issue, which has helped enhance our documentation to support our practices.